ABSTRACT OF THE DISCLOSURE

In a welding wire storage device for a welding system including a housing (42) with a wire core (43) surrounding the welding wire (13) being arcuately arranged to lie freely in a free space (45) of the housing (42), one end of the wire core (43) is fixed in an end region of the housing (42) and a measuring means (44) is provided to detect the deflection of the wire core (43). In order to provide a very simple and compact structure for such a welding wire storage device, the wire core (43) is displaceably mounted in a guide element (46) on the opposite end region, and two coupling mechanisms (48, 49) for connection with a wire guide hose (50) for the wire core (23) are arranged on the housing (42).